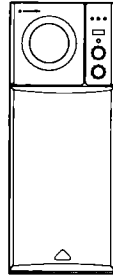


Service Manual



ORDER NO.
RRV 1613

POWERD SUBWOOFER

S-W200

THIS MANUAL IS APPLICABLE TO THE FOLLOWING MODEL(S) AND TYPE(S).

| Type | Model | Power Requirement | The voltage can be converted by the following method. |
|------|--------|---|---|
| | S-W200 | | |
| KUC | O | AC120V | — |
| SD | O | AC110 – 115V/120 – 127V/220 – 230V/240V | With the voltage selector |
| SL | O | AC110 – 115V/120 – 127V/220 – 230V/240V | With the voltage selector |

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1. SAFETY INFORMATION



This service manual is intended for qualified service technicians; it is not meant for the casual do-it-yourselfer. Qualified technicians have the necessary test equipment and tools, and have been trained to properly and safely repair complex products such as those covered by this manual. Improperly performed repairs can adversely affect the safety and reliability of the product and may void the warranty. If you are not qualified to perform the repair of this product properly and safely, you should not risk trying to do so and refer the repair to a qualified service technician.

WARNING

Lead in solder used in this product is listed by the California Health and Welfare agency as a known reproductive toxicant which may cause birth defects or other reproductive harm (California Health & Safety Code, Section 25249.5). When servicing or handling circuit boards and other components which contain lead in solder, avoid unprotected skin contact with the solder. Also, when soldering do not inhale any smoke or fumes produced.



NOTICE

(FOR CANADIAN MODEL ONLY)

Fuse symbols  (fast operating fuse) and/or  (slow operating fuse) on PCB indicate that replacement parts must be of identical designation.

REMARQUE

(POUR MOD+LE CANADIEN SEULEMENT)

Les symboles de fusible  (fusible de type rapide) et/ou  (fusible de type lent) sur CCI indiquent que les piéces de remplacement doivent avoir la mÉme d'Asignation.

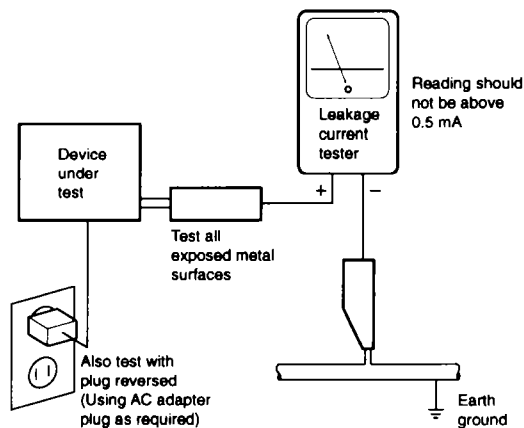
(FOR USA MODEL ONLY)

1. SAFETY PRECAUTIONS

The following check should be performed for the continued protection of the customer and service technician.

LEAKAGE CURRENT CHECK

Measure leakage current to a known earth ground (water pipe, conduit, etc.) by connecting a leakage current tester such as Simpson Model 229-2 or equivalent between the earth ground and all exposed metal parts of the appliance (input/output terminals, screwheads, metal overlays, control shaft, etc.). Plug the AC line cord of the appliance directly into a 120V AC 60 Hz outlet and turn the AC power switch on. Any current measured must not exceed 0.5 mA.




AC Leakage Test

ANY MEASUREMENTS NOT WITHIN THE LIMITS OUTLINED ABOVE ARE INDICATIVE OF A POTENTIAL SHOCK HAZARD AND MUST BE CORRECTED BEFORE RETURNING THE APPLIANCE TO THE CUSTOMER.

2. PRODUCT SAFETY NOTICE

Many electrical and mechanical parts in the appliance have special safety related characteristics. These are often not evident from visual inspection nor the protection afforded by them necessarily can be obtained by using replacement components rated for voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in this Service Manual.

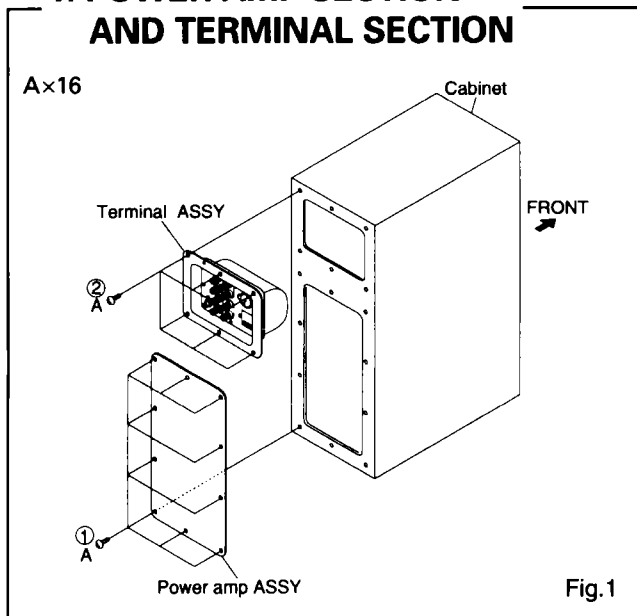
Electrical components having such features are identified by marking with a  on the schematics and on the parts list in this Service Manual.

The use of a substitute replacement component which does not have the same safety characteristics as the PIONEER recommended replacement one, shown in the parts list in this Service Manual, may create shock, fire, or other hazards.

Product Safety is continuously under review and new instructions are issued from time to time. For the latest information, always consult the current PIONEER Service Manual. A subscription to, or additional copies of, PIONEER Service Manual may be obtained at a nominal charge from PIONEER.

2. DISASSEMBLY

1. POWER AMP SECTION AND TERMINAL SECTION



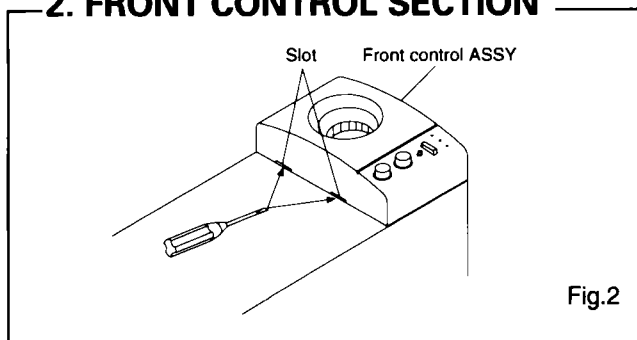
● POWER AMP SECTION

- Remove 10 screws (①) from the power amplifier.
- Remove 4(KUC type) /5(SD and SL types) connectors and the speaker connection cords.

● TERMINAL SECTION

- Remove 6 screws (②) from the terminal assy.
- Remove 2(KUC type) /3(SD and SL types) connectors from the power amplifier.

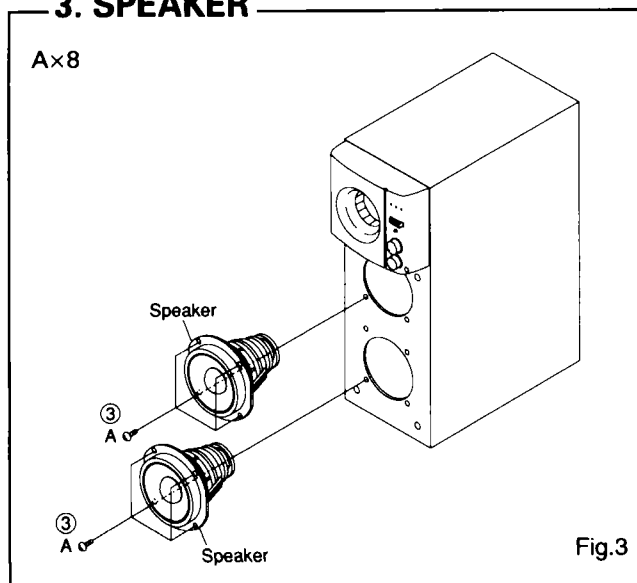
2. FRONT CONTROL SECTION



● FRONT CONTROL SECTION

- Remove the grill.
- Insert a screwdriver into the slit under the Front Control Assy to pry open the front panel gradually and uniformly.
- Remove 2 connectors from the power amplifier.

3. SPEAKER



● SPEAKER

- Remove the grill.
- Each speaker is attached to the baffle by 4 external screws. To detach it, unfasten those screws.
- When attaching it face its terminal downward.

3. PACKING, EXPLODED VIEWS AND PARTS LIST

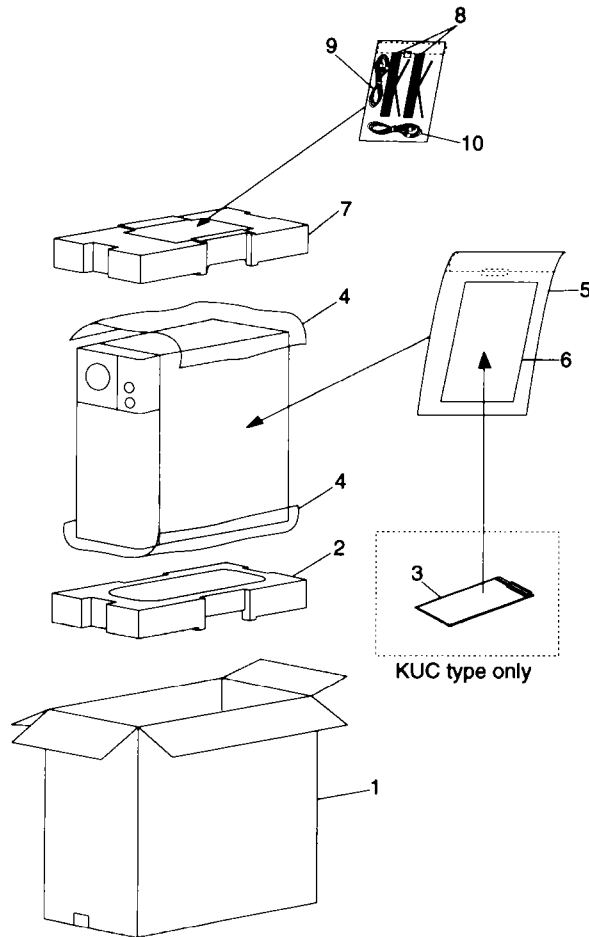
NOTES:

- Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.
- The Δ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.
- Parts marked by "●" are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.

3.1 PACKING

Parts List

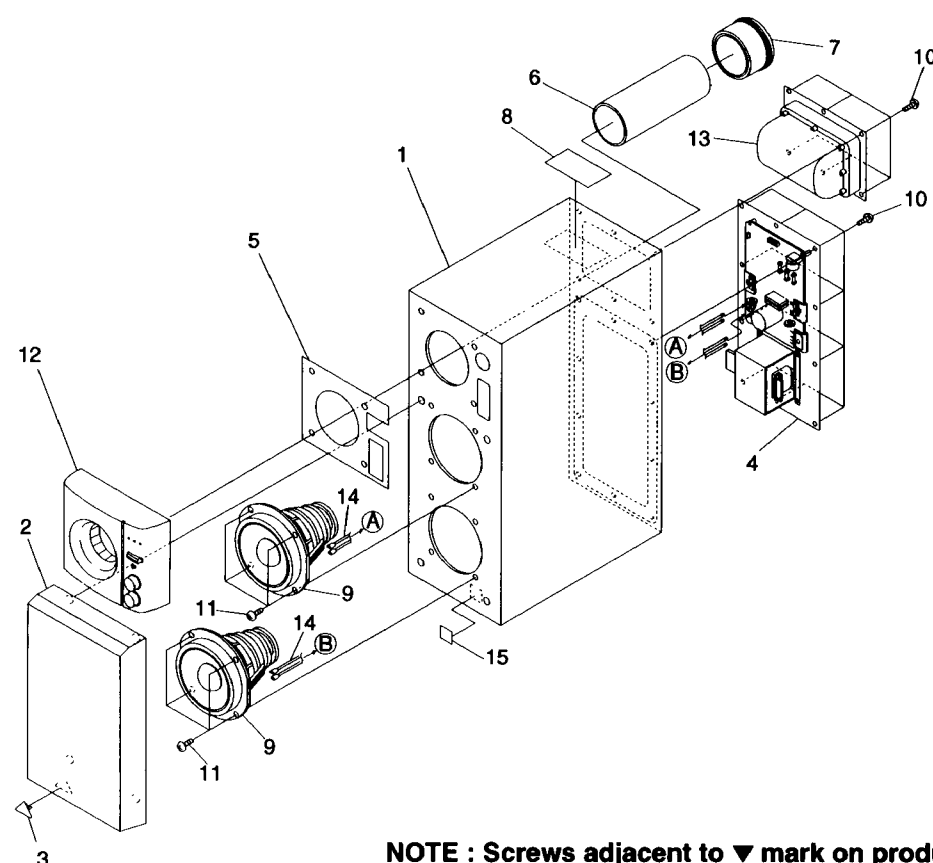
| Mark | No. | Description | Parts No. | Mark | No. | Description | Parts No. |
|------|-----|---|-----------|----------|-----|--|-----------|
| | 1 | Packing case (KUC type) | SHG1891 | | 6 | Operating instructions (English/Spanish/Chinese) (SD and SL types) | SRD1153 |
| | 1 | Packing case (SD type) | SHG1888 | | 7 | Top protector | SHA1962 |
| | 1 | Packing case (SL type) | SHG1890 | | 8 | Service cord | SDS1012 |
| | 2 | Bottom protector | SHA1963 | | 9 | Connection cord | SDE1019 |
| NSP | 3 | Warranty card (KUC type only) | ARY1044 | | 10 | AC power cord (KUC type) | ADG1126 |
| | 4 | Protection mat S5 | SHC1623 | Δ | 10 | AC power cord (SD type) | ADG1158 |
| NSP | 5 | Dependence set (KUC type) | SME2529 | Δ | 10 | AC power cord (SL type) | ADG1154 |
| NSP | 5 | Dependence set (SD and SL types) | SME2528 | Δ | | | |
| | 6 | Operating instructions (English/French) (KUC type) | SRD1154 | | | | |



3.2 EXTERIOR

Parts List

| Mark | No. | Description | Parts No. | Mark | No. | Description | Parts No. |
|------|-----|---------------------------|-----------|---------|-----|--------------------------|-----------|
| A | NSP | 1 | Cabinet | SMM1703 | 9 | Speaker | SWM1034 |
| | | 2 | Grill | SMG1487 | 10 | Screw | SBA - 153 |
| | | 3 | Logo | SAM1396 | 11 | Screw | SBA - 122 |
| NSP | 4 | Power amp ASSY (KUC type) | AXX7033 | NSP | 12 | Front control ASSY | AXX7031 |
| NSP | 4 | Power amp ASSY (SD type) | AXX7035 | NSP | 13 | Terminal ASSY (KUC type) | AXX7026 |
| NSP | 4 | Power amp ASSY (SL type) | AXX7036 | NSP | 13 | Terminal ASSY (SD type) | AXX7028 |
| | 5 | Gascket | SEC1297 | NSP | 13 | Terminal ASSY (SL type) | AXX7029 |
| NSP | 6 | Port - tube ASSY | SMR1250 | NSP | 14 | SP cord ASSY | ADX7133 |
| NSP | 7 | Port ling | SNK1906 | NSP | 15 | UL Caution Card | AAX - 313 |
| NSP | 8 | 65 label (KUC type only) | SRW1013 | | | | |

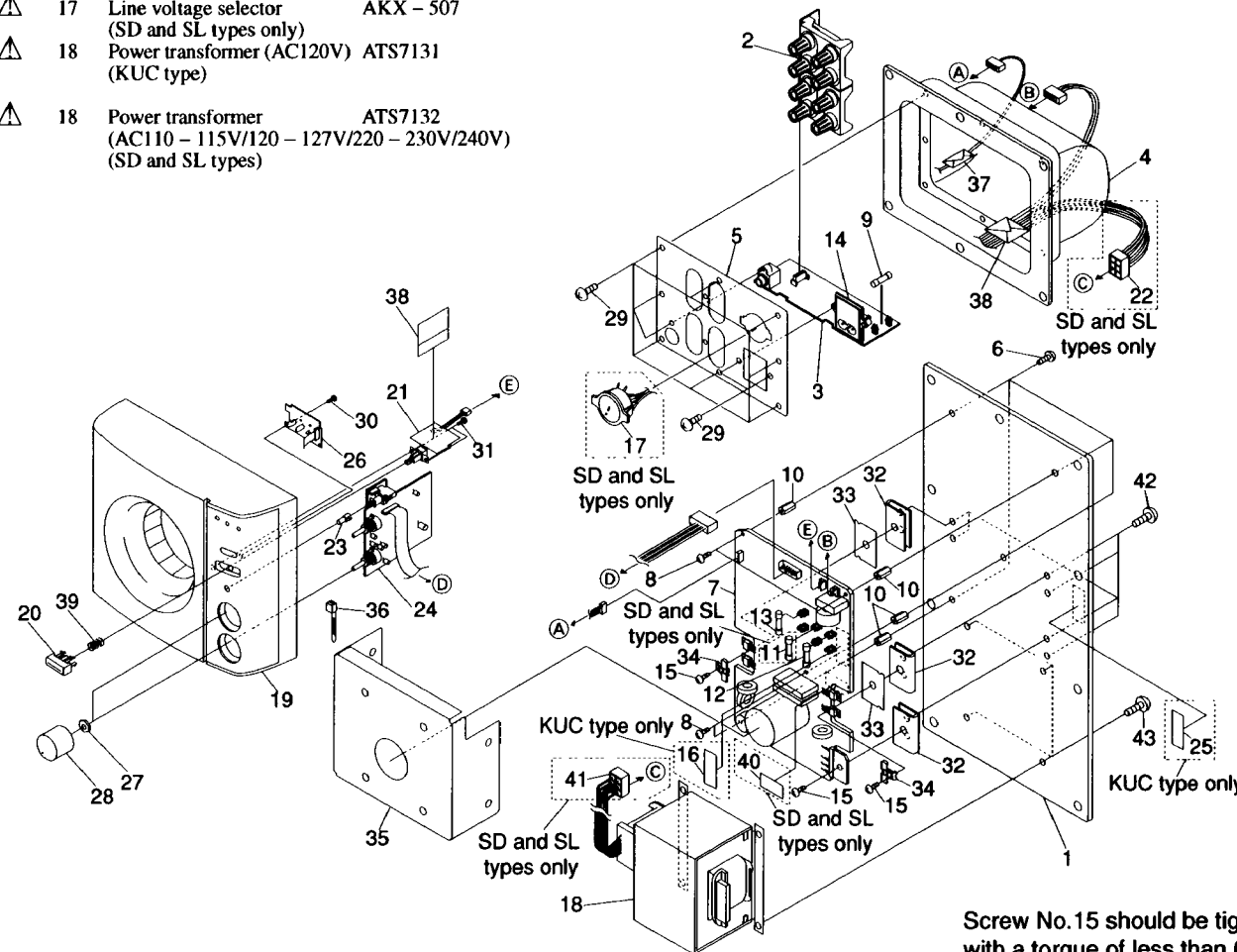


NOTE : Screws adjacent to ▼ mark on product are used for disassembly.

3.3 POWER AMP SECTION

Parts List

| Mark | No. | Description | Parts No. | Mark | No. | Description | Parts No. |
|------|-----|---|--------------|------|--|---------------------------|-----------|
| NSP | 1 | Main rear panel | ANC7441 | 19 | Front panel ASSY | ANB7061 | |
| | 2 | SPEAKER IN ASSY | AWZ8408 | 20 | Power button | AAD2539 | |
| | 3 | AC & PIN IN ASSY | AWZ8409 | 21 | POWER SW ASSY | AWZ8405 | |
| | 4 | Terminal box | AEC7067 | 22 | 6P Lead with housing (SD and SL types only) (Pin) | ADX7134 | |
| | 5 | Terminal plate (KUC type) | ANC7440 | | | | |
| | 5 | Terminal plate (SD and SL types) | ANC7442 | 23 | Push button (0°/180°) | AAD2423 | |
| | 6 | Screw | BMT30P080FZK | 24 | VOLUME ASSY | AWZ8407 | |
| | 7 | MAIN ASSY | AWZ8406 | NSP | 25 | Fuse card (KUC type only) | AAX - 111 |
| △ | 8 | Screw | BMZ30P060FCU | NSP | 26 | INDICATOR ASSY | AWZ8410 |
| | 9 | Fuse (6.3A/125V) FU1601 (KUC type) | REK1085 | 27 | Nut | NK90FZB | |
| △ | 9 | Fuse (6.3A/250V) FU1601 (SD and SL types) | REK1030 | 28 | VR Knob | AAB7098 | |
| △ | 10 | PCB holder | ANL7005 | 29 | Screw | BPZ30P080FZK | |
| △ | 11 | Fuse (T3.15AL/250V) FU1001 (SD and SL types only) | AEK1059 | 30 | Screw | VPZ26P060FMC | |
| △ | 12 | Fuse (6.3A/125V) FU1002 (KUC type) | REK1085 | 31 | Screw | VPZ30P080FMC | |
| △ | 12 | Fuse (T3.15AL/250V) FU1002 (SD and SL types) | AEK1059 | 32 | Heatsink | ANH7045 | |
| △ | 13 | Fuse (1.0A/125V) FU101 (KUC type) | REK1075 | △ | 33 | Sheet | AEB1256 |
| △ | 13 | Fuse (T500mA/250V) FU101 (SD and SL types) | AEK1051 | 34 | Holder | AEC7059 | |
| △ | 14 | AC inlet (KUC type) | AKP1122 | 35 | Shield case | ANK7025 | |
| △ | 14 | AC inlet (SD and SL types) | AKP1132 | NSP | 36 | Binder | ZCA - BK1 |
| | 15 | Screw | ABA1052 | 37 | Packing | AED7010 | |
| NSP | 16 | Fuse card (KUC type only) | AAX1180 | 38 | Packing | AED7011 | |
| △ | 17 | Line voltage selector (SD and SL types only) | AKX - 507 | 39 | Lock lever spring | ABH7004 | |
| △ | 18 | Power transformer (AC120V) (KUC type) | ATS7131 | 40 | Sheet A (SD and SL types only) | AEC7062 | |
| △ | 18 | Power transformer (AC110 - 115V/120 - 127V/220 - 230V/240V) (SD and SL types) | ATS7132 | 41 | 6P Lead with housing (SD and SL types only) (Socket) | ADX7135 | |
| | | | | 42 | Screw | BBT30P080FZK | |
| | | | | 43 | Screw | ABA7028 | |



Screw No.15 should be tightened with a torque of less than 6kg.

4. SCHEMATIC AND PCB CONNECTION DIAGRAMS

NOTE FOR SCHEMATIC DIAGRAMS (Type 1A)
 1. When ordering service parts, be sure to refer to "PARTS LIST OF EXPLODED VIEWS" or "PCB PARTS LIST".

2. Since these are basic circuits, some parts of them or the values of some components may be changed for improvement.

3. **RESISTORS:**
 Unit: k: kΩ, M: MΩ, or Ω unless otherwise noted
 Rated power 1/4W, 1/6W, 1/8W, 1/10W unless otherwise noted.
 Tolerance (F): ±1%, (G): ±2%, (K): ±10%, (M): ±20% or ±5% unless otherwise noted

4. **CAPACITORS:**
 Unit: p: pF or μF unless otherwise noted
 Ratings: capacitor (μF)/voltage(V) unless otherwise noted
 Rated voltage: 50V except for electrolytic capacitors

5. **COILS:**
 Unit: m: mH or μH unless otherwise noted

6. **VOLTAGE AND CURRENT:**
 Signal voltage at rated output
 or ← V
 DC voltage (V) at no input signal unless otherwise noted
 Value in () is DC voltage at rated power
 ← mA or ← mA
 DC current at no input signal unless otherwise noted

7. **OTHERS:**
 • ○ or ○ : Adjusting point.
 • ◁ : Measurement point.
 • The Δ mark found on some component parts indicates the importance of the safety factor of the parts. Therefore, when replacing, be sure to use parts of identical designation.

8. **SCH-□ ON THE SCHEMATIC DIAGRAM:**
 • SCH-□ indicates the drawing number of the schematic diagram. (SCH stands for schematic diagram)

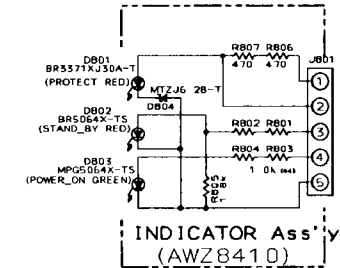
9. **SWITCHES** (Underline indicates switch position)

A

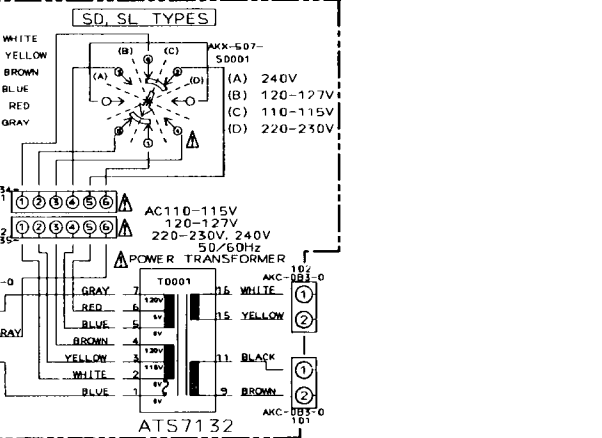
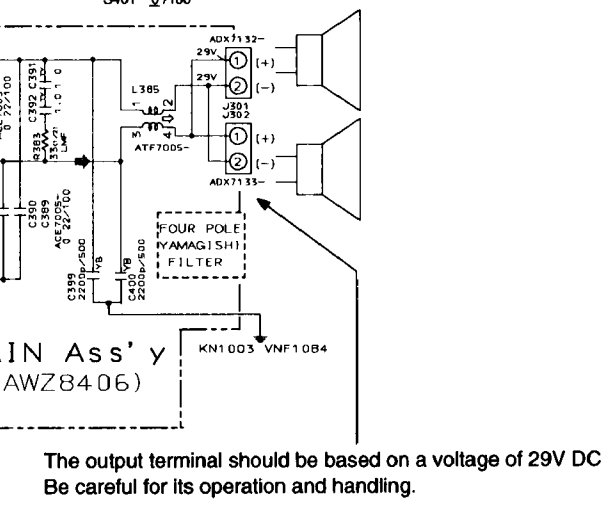
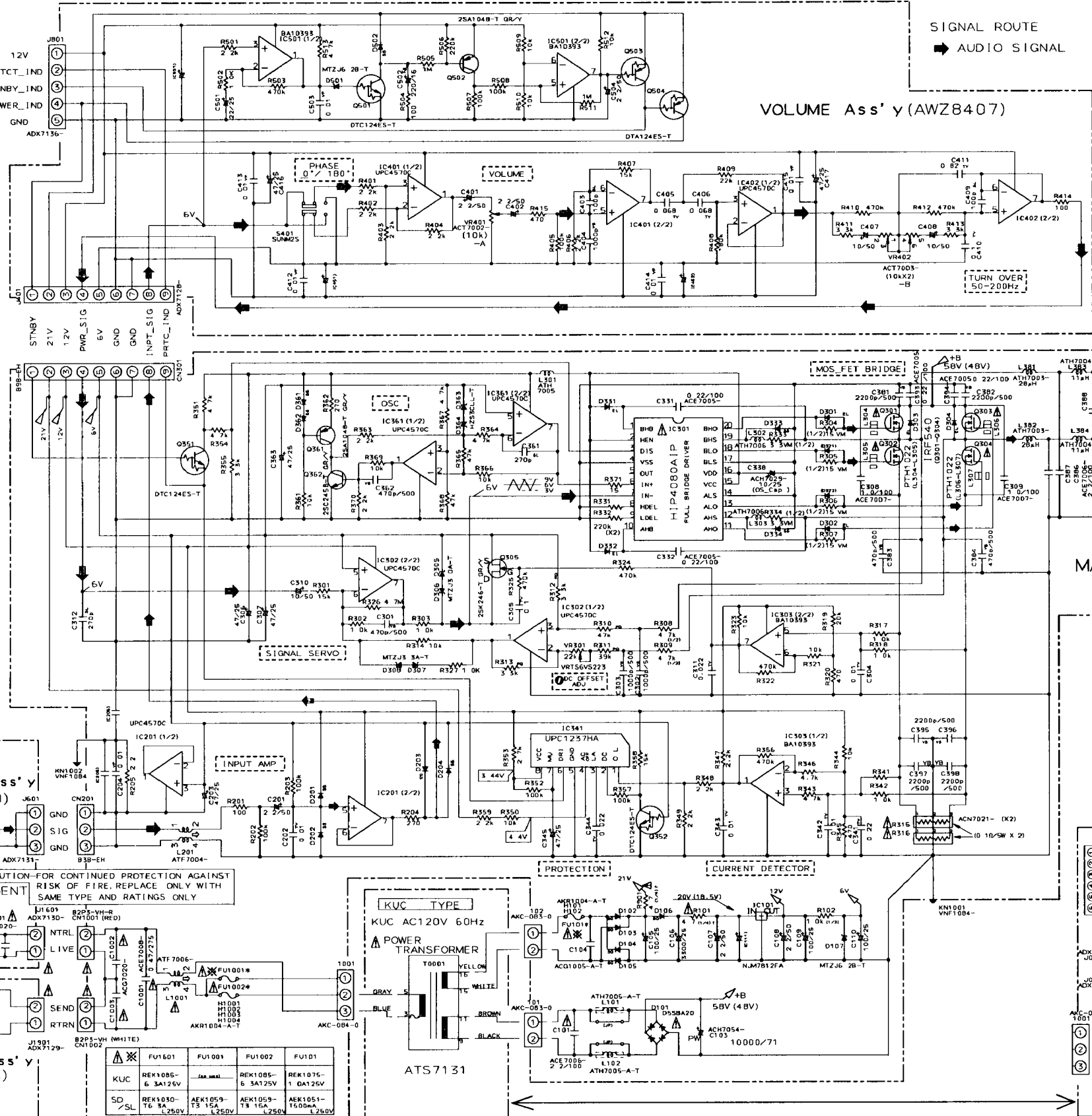
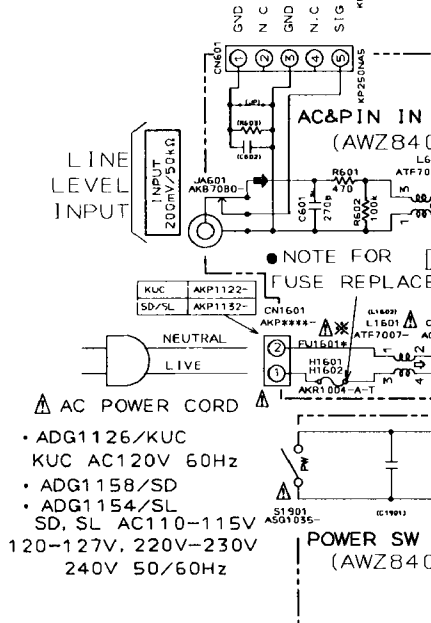
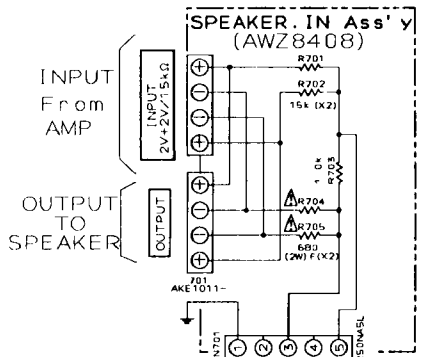
B

C

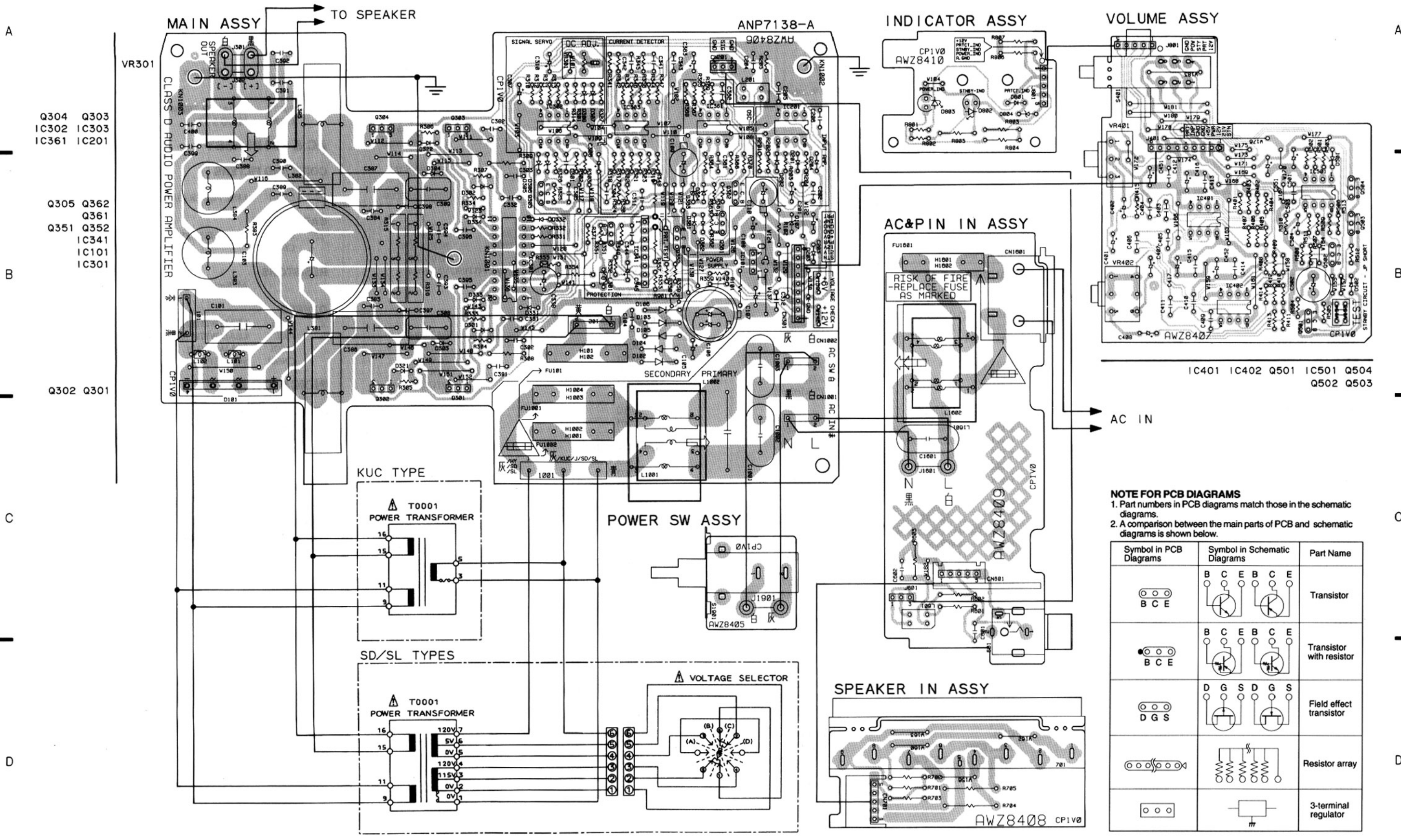
D



- NOTES**
- RESISTORS**
 Indicated in Ohm (Ω)
 1/4W 15% tolerance unless otherwise noted kΩ, MΩ
 *F... non-flammable type
 *F... quick-open type
 *FO... 1/50D
 *VM... RD1/4VM
 - DIODES**
 *SS... 1SS252
 *SG... 5S6B8G
 *EL... 10EL52
 - CAPACITORS**
 Indicated in Capacity (μF)/Voltage (V)
 unless noted pF
 Indication without voltage is 50V
 *SL... CCCC
 *YF... CKCVT
 *YB... CKCYB
 *TV... CFYA
 *NL... CEANL
 (*# no marking... CEAS)
 - PARTS** indicated "(CR.No)" are not used



- This diagram is viewed from the mounted parts side.
- The parts mounted on this PCB include all necessary parts for several destinations. For further information for respective destinations, be sure to check with the schematic diagram.



Q304 Q303
IC302 IC303
IC361 IC201

Q305 Q362
Q361
Q351 Q352
IC341
IC101
IC301

Q302 Q301

IC401 IC402 Q501 IC501 Q504
Q502 Q503

NOTE FOR PCB DIAGRAMS
 1. Part numbers in PCB diagrams match those in the schematic diagrams.
 2. A comparison between the main parts of PCB and schematic diagrams is shown below.

| Symbol in PCB Diagrams | Symbol in Schematic Diagrams | Part Name |
|------------------------|------------------------------|--------------------------|
| | | Transistor |
| | | Transistor with resistor |
| | | Field effect transistor |
| | | Resistor array |
| | | 3-terminal regulator |

1 2 3 4 5 6

1 2 3 4 5 6

5. PCB PARTS LIST

NOTES:

- Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.
- The Δ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.
- Parts marked by "●" are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.
- When ordering resistors, first convert resistance values into code form as shown in the following examples.

Ex.1 When there are 2 effective digits (any digit apart from 0), such as 560 ohm and 47k ohm (tolerance is shown by J = 5%, and K = 10%).

| | | | | | | |
|------|---|----------------------|-------|-----|-------|-------------|
| 560Ω | → | 56 × 10 ¹ | → | 561 | | RD1/4PU561J |
| 47kΩ | → | 47 × 10 ³ | → | 473 | | RD1/4PU473J |
| 0.5Ω | → | 0R5 | | | | RN2H0R5K |
| 1Ω | → | 1R0 | | | | RS1P1R0K |

Ex.2 When there are 3 effective digits (such as in high precision metal film resistors).

| | | | | | | |
|--------|---|-----------------------|---|------|-------|--------------|
| 5.62kΩ | → | 562 × 10 ¹ | → | 5621 | | RN1/4PC5621F |
|--------|---|-----------------------|---|------|-------|--------------|

| Mark No. | Description | Parts No. | Mark No. | Description | Parts No. |
|----------|-------------|-----------|----------|-------------|-----------|
|----------|-------------|-----------|----------|-------------|-----------|

LIST OF ASSEMBLIES

| | | |
|----------|------------------|---------|
| Δ | POWER SW ASSY | AWZ8405 |
| | MAIN ASSY | AWZ8406 |
| | VOLUME ASSY | AWZ8407 |
| NSP | SPEAKER IN ASSY | AWZ8408 |
| | AC & PIN IN ASSY | AWZ8409 |
| NSP | INDICATOR ASSY | AWZ8410 |

POWER SW ASSY

OTHERS

| | | |
|----------------|-------------------|---------|
| J1901 | LEAD WITH HOUSING | ADX7129 |
| Δ S1901 | PUSH SWITCH | ASG1035 |

MAIN ASSY

SEMICONDUCTORS

| | |
|-------------------------|------------|
| IC303 | BA10393 |
| Δ IC301 | HIP4080AIP |
| IC101 | NJM7812FA |
| IC341 | UPC1237HA |
| IC201, IC302, IC361 | UPC4570C |
| Q361 | 2SA1048 |
| Q362 | 2SC2458 |
| Q305 | 2SK246 |
| Q351, Q352 | DTC124ES |
| Δ Q301 - Q304 | IRF540 |
| D301 - D304, D331, D332 | 10ELS2 |
| D201 - D204, D333, D334 | 1SS252 |
| D361, D362 | 1SS252 |
| Δ D101 | D5SBA20 |
| D363, D364 | HZS3CLL |
| D305, D306 | MTZJ3.0A |
| D307, D308 | MTZ3.3A |
| D107 | MTZJ6.2B |
| D102 - D106 | S5688G |

COILS AND FILTERS

| | |
|------------------------|---------|
| L201 | ATF7004 |
| L385 (0.3mmH, AC250V) | ATF7005 |
| L1001 (5.0mmH, AC250V) | ATF7006 |
| L381, L382 (28μH) | ATH7003 |
| L383, L384 (11μH) | ATH7004 |
| L101, L102, L301 | ATH7005 |
| L302, L303 | ATH7006 |
| L304 - L307 | PTH1022 |

CAPACITORS

| | |
|--|--------------|
| C331, C332, C388 - C390 (0.22μF/100V) | ACE7005 |
| C393, C394 (0.22μF/100V) | ACE7005 |
| Δ C101 (2.2μF/100V) | ACE7006 |
| C386, C387 (2.2μF/100V) | ACE7006 |
| C308, C309 (1.0μF/100V) | ACE7007 |
| Δ C1001 (0.47μF/AC275V) | ACE7008 |
| C104 (0.01μF/AC150V) | ACG1005 |
| Δ C1002, C1003 (10000pF/AC250V) | ACG7020 |
| C338 (10μF/25V) | ACH7029 |
| C103 (10000μF/71V) | ACH7054 |
| C312, C361 | CCCSL271J50 |
| C310 | CEAS100M50 |
| C105, C109, C110 | CEAS101M25 |
| C107, C108, C201 | CEAS2R2M50 |
| C106 | CEAS332M25 |
| C203, C306, C307, C345, C363 | CEAS470M25 |
| C202, C304, C342, C343 | CFTYA103J50 |
| C305 | CFTYA104J50 |
| C391, C392 | CFTYA105J50 |
| C311, C344 | CFTYA223J50 |
| C341 | CFTYA224J50 |
| C302, C303 | CKCYB102K500 |
| C381, C382, C395 - C400 | CKCYB222K500 |
| C301, C362, C383, C384 | CKCYB471K500 |
| C204 | CKCYF103Z50 |

| Mark No. | Description | Parts No. |
|----------|-------------|-----------|
|----------|-------------|-----------|

RESISTORS

| | |
|--------------------------------|--------------|
| Δ R315, R316 (0.1Ω, 5W) | ACN7021 |
| R102 | RD1/2PM102J |
| R308, R309 | RD1/2PM472J |
| R383 | RD1/2LMF330J |
| R304 - R307 | RD1/2VM150J |
| R333, R334 | RD1/2VM3R3J |
| Δ R101, R901 | RFA1/4PS4R7J |
| R312, R313 | RN1/6PQ3301F |
| R311 | RN1/6PQ3902F |
| R310 | RN1/6PQ4702F |
| VR301 (22kΩ) | VRTS6VS223 |
| Other Resistors | RD1/4PU□□□J |

OTHERS

| | | |
|-----------------|---------------------|-----------|
| J301 | SPEAKER CORD ASSY | ADX7133 |
| Δ CN1002 | 2P - VH CONNECTOR | B2P3 - VH |
| CN201 | 3P TOP POST | B3B - EH |
| KN1001 - KN1003 | EARTH METAL FITTING | VNF1084 |

VOLUME ASSY

SEMICONDUCTORS

| | |
|-------------------|-------------|
| IC501 | BA10393 |
| IC401, IC402 | UPC4570C |
| Q502 | 2SA1048 |
| Q503, Q504 | DTA124ES |
| Q501 | DTC124ES |
| D502 | 1SS252 |
| D501 | MTZJ6.2B |
| C403, C409 | CCCSL101J50 |
| C502 | CEANL221M16 |
| C407, C408 | CEAS100M50 |
| C501 | CEAS220M25 |
| C401, C402, C504 | CEAS2R2M50 |
| C416, C417 | CEAS470M25 |
| C410 | CFTYA104J50 |
| C405, C406 | CFTYA683J50 |
| C411 | CFTYA824J50 |
| C404 | CKCYB102K50 |
| C412 - C415, C503 | CKCYF103Z50 |

RESISTORS

| | |
|--------------------|-------------|
| VR401 (10kΩ • A) | ACT7002 |
| VR402 (10kΩ • B×2) | ACT7003 |
| Other Resistors | RD1/4PU□□□J |

OTHERS

| | | |
|------|----------------------|---------|
| J401 | 9P LEAD WITH HOUSING | ADX7128 |
| S401 | PUSH SWITCH | SUNM2S |

| Mark No. | Description | Parts No. |
|----------|-------------|-----------|
|----------|-------------|-----------|

SPEAKER IN ASSY

RESISTORS

| | |
|-----------------|-------------|
| R704, R705 | RS2LMF681J |
| Other Resistors | RD1/4PU□□□J |

OTHERS

| | | |
|-------|------------------------|-----------|
| 701 | SPEAKER TERMINAL 8 - P | AKE1011 |
| CN701 | PLUG 5 - P | KM250NA5L |

AC & PIN IN ASSY

COILS AND FILTERS

| | | |
|----------------|-----------------------------|---------|
| L601 | ATF7004 | |
| Δ L1601 | LINE FILTER (0.05mH/AC250V) | ATF7007 |

CAPACITORS

| | |
|---------------------------------|-------------|
| Δ C1601 (10000pF/AC250V) | ACG7020 |
| C601 | CCCSL271J50 |

RESISTORS

| | |
|---------------|-------------|
| All Resistors | RD1/4PU□□□J |
|---------------|-------------|

OTHERS

| | | |
|----------------|-------------------|----------|
| Δ J1601 | LEAD WITH HOUSING | ADX7130 |
| J601 | LEAD WITH HOUSING | ADX7131 |
| JA601 | PIN JACK(1P) | AKB7080 |
| CN601 | SOCKET 5 - P | KP250NA5 |

INDICATOR ASSY

SEMICONDUCTORS

| | | |
|------|-------------|-------------|
| D801 | LED (RED) | BR3371XJ30A |
| D802 | LED (RED) | BR5064X |
| D803 | LED (GREEN) | MPG5064X |
| D804 | | MTZJ6.2B |

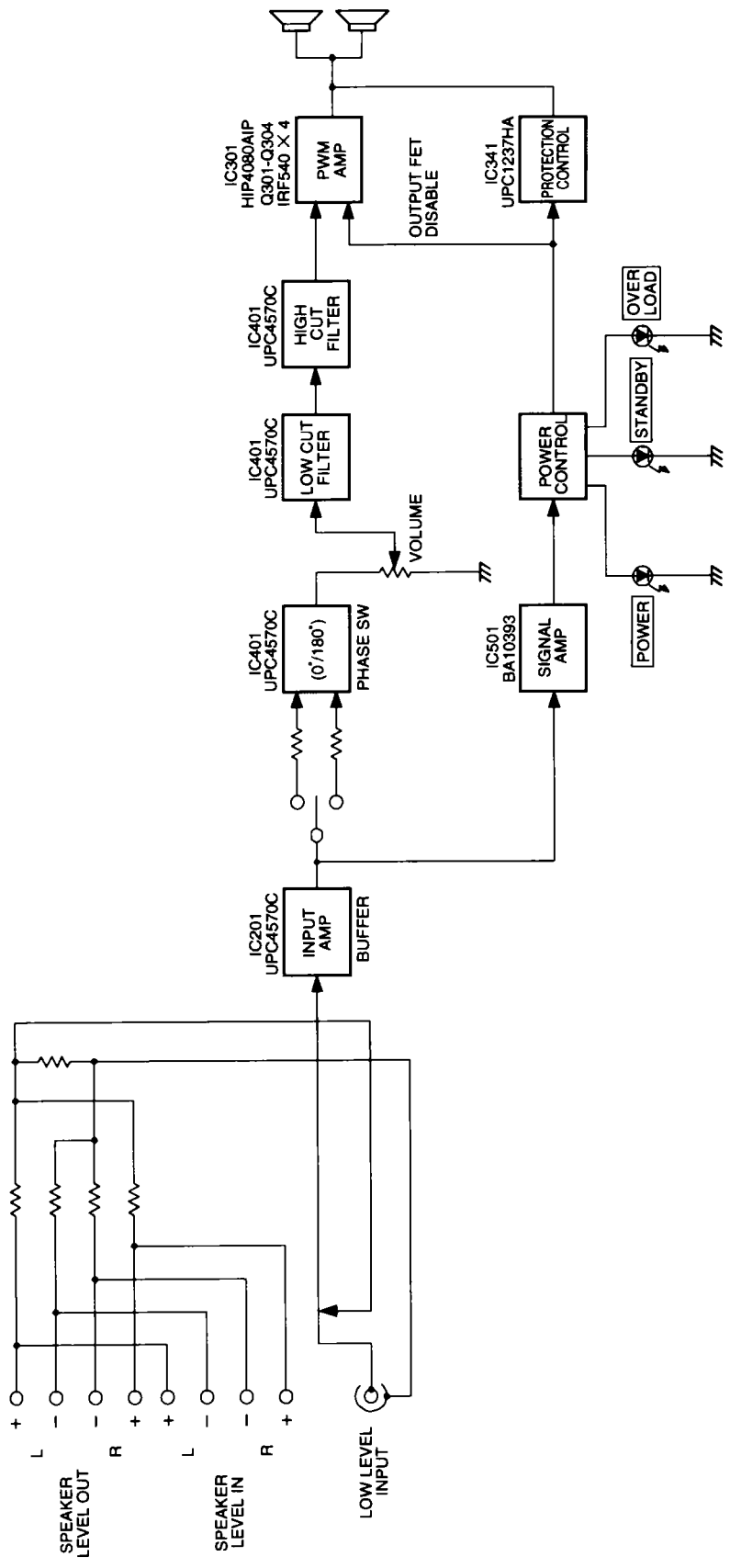
RESISTORS

| | |
|---------------|-------------|
| All Resistors | RD1/4PU□□□J |
|---------------|-------------|

OTHERS

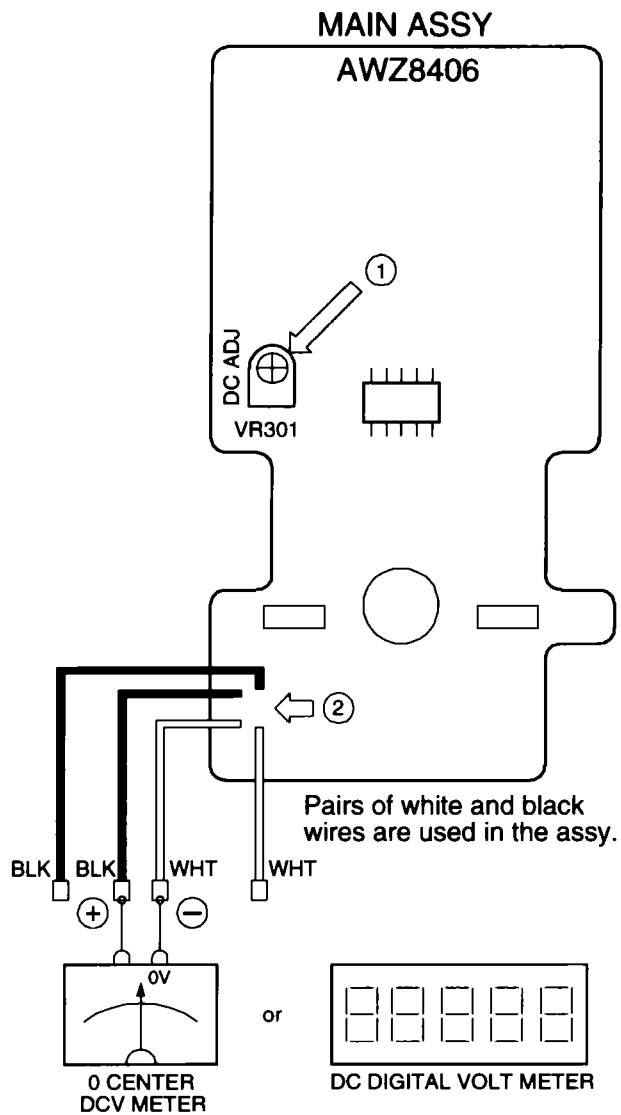
| | | |
|------|----------------------|---------|
| J801 | 5P LEAD WITH HOUSING | ADX7136 |
|------|----------------------|---------|

6. BLOCK DIAGRAM



7. ADJUSTMENTS

DC OFFSET ADJUSTMENT OF OUTPUT TERMINAL



1. Connect the DC voltmeter to either one of the two white or black wires (two white wires and two black wires) from SPEAKER OUT ②.
2. Adjust the VR301 ① so that the DC voltage of SPEAKER OUT ② is set to $0 \pm 5\text{mV}$.

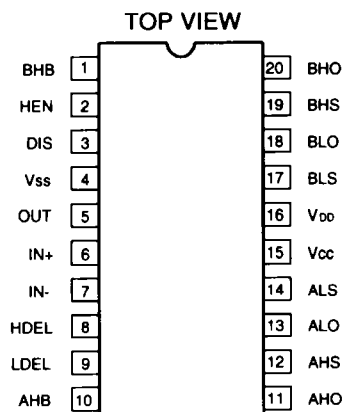
Note: Perform the above adjustment more than one minute after turning the power ON.

8. IC INFORMATION

■ HIP4080AIP (IC301:MAIN ASSY)

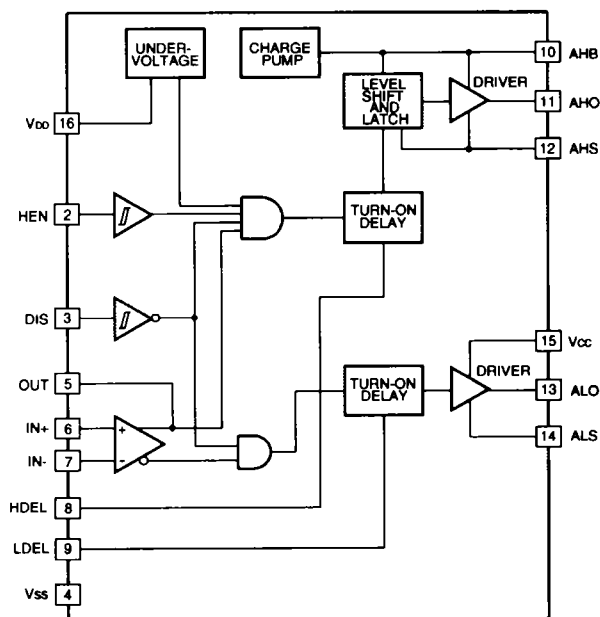
● FULL BRIDGE MOS F.E.T. DRIVER

● Pin Assignment



- The information shown in the list is basic information and may not correspond exactly to that shown in the schematic diagrams.

● Block Diagram

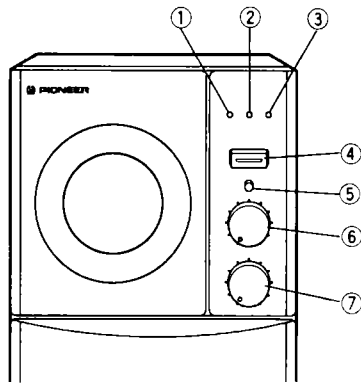


● Pin Function

| No | Pin Name | Description |
|----|-----------------|---|
| 1 | BHB | Power source of the upper bootstrap on the B side of full bridge. |
| 2 | HEN | Upper enable input |
| 3 | DIS | Disable input |
| 4 | V _{SS} | To the power terminal GND on the negative side. |
| 5 | OUT | Input control comparator output terminal |
| 6 | IN+ | Non-reverse input of control comparator |
| 7 | IN- | Reversed input of control comparator |
| 8 | HDEL | Upper turn-on delay |
| 9 | LDEL | Lower turn-on delay |
| 10 | AHB | Power source of the upper bootstrap on the A side of full bridge. |
| 11 | AHO | Output of the upper bootstrap on the A side of full bridge. |
| 12 | AHS | Upper leased connection on the A side of full bridge. |
| 13 | ALO | Lower output on the A side of full bridge. |
| 14 | ALS | Lower leased connection on the A side of full bridge. |
| 15 | V _{CC} | Positive power source of gate driver. |
| 16 | V _{DD} | Positive power source of lower gate driver. |
| 17 | BLS | Lower leased connection on the B side of full bridge. |
| 18 | BLO | Lower output on the B side of full bridge. |
| 19 | BHS | Upper leased connection on the B side of full bridge. |
| 20 | BHO | Upper output on the B side of full bridge. |

9. PANEL FACILITIES

Ⓐ FRONT PANEL



① Power Indicator

Illuminates when the power is on.

② STANDBY Indicator (STANDBY)

Illuminates during AUTO POWER OFF (STANDBY status).

- AUTO POWER OFF Function.

When there is no input signal for 6–8 minutes, the power automatically switches off to conserve energy. As soon as a signal is received again, the power switches ON.

③ OVERLOAD indicator (OVERLOAD)

Lights when the input signal is excessively large or when the amplifier is not operating correctly.

- When the OVERLOAD indicator is lit, turn the POWER switch OFF and then ON again. If the indicator still remains lit, please contact a PIONEER-authorized service center.

④ Power switch (POWER)

When pressed, power is turned ON; when pressed again, power is turned OFF.

⑤ Phase switch (PHASE \blacksquare 0° / \blacktriangle 180°)

When depressed (\blacktriangle 180°), the output phase becomes the reverse of the input signal, and when raised (\blacksquare 0°), it is in the same phase as the input signal.

- Normally, the switch is set to (\blacksquare 0°).

But when the sound connection between the subwoofer and the left and right speakers sounds unnatural, try switching to 180° and set the switch in the position where the sound is natural.

⑥ Level knob (LEVEL)

Sets the subwoofer volume.

- Turn the knob slowly from the MIN position.
- With this unit, the bass level can be independently set, so do not turn up the bass on the stereo amplifier.

⑦ Turnover knob (TURNOVER)

Sets the high limit of the frequency played back by the subwoofer.

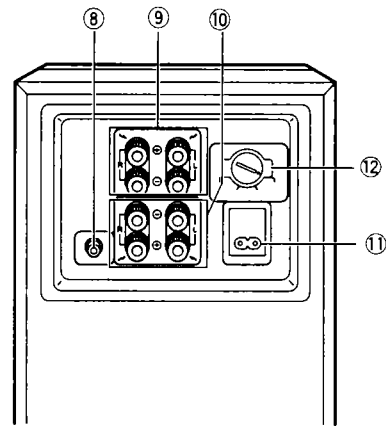
- Setting Criteria

50Hz ... when the diameter of the left/right speakers is 20-cm or more.

100Hz .. when the diameter of the left/right speakers is 10–25-cm.

200Hz .. when the diameter of the left/right speakers is 12-cm or less.

Ⓑ REAR PANEL



REAR PANEL (Ⓑ)

⑧ Line Level Input terminal (LINE LEVEL INPUT)

Connects to the stereo amplifier's SUBWOOFER PRE-OUT terminal, with the specially provided RCA plug cord.

⑨ Speaker Level Output terminals (SPEAKER LEVEL OUTPUT)

When the speakers output terminals on the stereo amplifier are connected to this unit's SPEAKER LEVEL INPUT terminals ⑩ and used as the unit's input signal, these terminals are used to connect the left and right speakers via the unit.

⑩ Speaker Level Input terminals (SPEAKER LEVEL INPUT)

Connect to the speakers output terminals on the stereo amplifier, with the specially provided speaker cords.

⑪ AC Inlet (AC INLET)

Connects to the stereo amplifier's or receiver's AC outlet or an AC wall outlet, with the specially provided power cord.

⑫ Voltage Selector (VOLTAGE SELECTOR) SD, SL only

10. SPECIFICATIONS

Cabinet A floor, bass-reflex type, with a built-in amplifier, having a PVC-sheet (Black) finishing.

Speaker (Magnetically shielded type) 15 cm (5 – 7/8 in.) × 2

Power Amplifier

Continuous Average Power Output is 200 Watts* min, at 4 ohms from 30 Hertz to 200 Hertz with no more than 10% total harmonic distortion.**

* *Measured pursuant to the Federal Trade Commission's Trade Regulation rule on Power Output Claims for Amplifiers.*

** *Measured by Audio Spectrum Analyzer.*

Total Harmonic Distortion 0.3%
(30 – 200Hz, 4Ω, 50W)

Input (sensitivity at 60 Hz/impedance)

SPEAKER LEVEL 3V + 3V/15kΩ
(both channels in-phase)

LINE LEVEL (RCA jack) 300 mV/50 kΩ

Turnover Frequency 50 – 200 Hz (continuously variable)

Outline Dimension 210 (W) × 550 (H) × 428 (D) mm
8 – 5/16 (W) × 21 – 5/8 (H) × 16 – 7/8 (D) in.

Weight (without package) 14.8 kg (32 lb 10 oz)

Power Requirements

KUC type AC 120V, 60Hz

SD and SL types AC 110 – 115/120 – 127/220 – 230/240V,
(switchable), 50/60Hz

Power Consumption 60 W

Accessories Speaker cords × 2

RCA plug cord × 1

Operating instructions × 1

Warranty card × 1

NOTE:

Specifications and design subject to possible modification without notice, due to improvements.